



FACT SHEET

Missouri Department of Natural Resources



FORMER AMOCO SUGAR CREEK REFINERY SUGAR CREEK, MISSOURI

MAY 1999

Introduction

The U. S. Environmental Protection Agency (EPA) Region 7 and the Missouri Department of Natural Resources (MDNR) have prepared this fact sheet to provide information to the community about ongoing activities at the Former Amoco Sugar Creek Refinery at 1000 N. Sterling Road in Sugar Creek, Missouri. Additional fact sheets about the former refinery cleanup activities will be prepared in the future.

Public Availability Session Approaches

EPA/MDNR will hold a public availability session from 4 p.m. to 8 p.m. Tuesday, May 18, 1999, at Lanard Hall, 106 S. Sterling Avenue, Sugar Creek, Missouri.

The public is invited to attend this session at its convenience between 4 p.m. and 8 p.m.

Representatives from EPA, MDNR, Missouri Department of Health (MDOH), Agency for Toxic and Disease Registry (ATSDR), and the City of Sugar Creek will be available to answer questions one-on-one about the contamination at the refinery and related health concerns.

Current Status of Business Operations

Q: Is Amoco Oil Co. still operating its petroleum refinery?

A: No. Currently a portion of the former refinery is operating as a light oil petroleum marketing terminal and pipeline facility. Since 1996 Atlanta Terminals Co. has been operating an asphalt plant on the former refinery.

RCRA Corrective Action Process

Q: Is there an agreement requiring Amoco Oil Co. to conduct specific tasks?

A: In June 1989, EPA issued a consent order to Amoco regarding the former refinery. The EPA consent order requires Amoco (1) to conduct short term cleanup actions, called Interim Measures, to address potential threats to human health or the environment; (2) to conduct a

comprehensive investigation, called a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI), that determines the nature and extent of releases of contaminants from the facility; and (3) to identify and evaluate alternatives for the corrective action necessary to prevent or control migration or releases of contaminants from the facility through a Corrective Measures Study (CMS).

Q: What is the procedure for addressing contamination at the former refinery?

A: The RCRA Corrective Action Process is structured around steps which are common to most cleanups under other EPA programs. Since the steps necessary to achieve cleanup at a facility depend on site specific conditions, the corrective action process is flexible. The following are the six common steps of the corrective action process; however, each component is not required to determine which actions are necessary at any specific site:

Step 1:

RCRA Facility Assessment (RFA)

An initial site assessment in which owners and/or operators of a facility, with oversight by regulatory agencies, compile existing information on environmental conditions at the facility, including information on potential releases of contaminants to the environment. The RFA for the former refinery was completed in January 1988.

Step 2:

Phase I RCRA Facility Investigation (Phase I RFI)

This investigation is used to confirm or reduce uncertainty about areas of concern or potential releases of contaminants identified during the RFA. Amoco did not conduct a Phase I RFI, instead it initiated a comprehensive RFI for the former refinery.

Step 3:

RCRA Facility Investigation (RFI)

This investigation determines the nature and extent of contamination of releases identified during the RFA or Phase I RFI. Amoco submitted the original RFI to EPA for review in March 1993. Based on this review of the RFI, EPA requested Amoco to conduct additional investigations. Amoco conducted the additional field investigations and submitted a revised RFI report in December 1995.

Step 4:

Interim Measures

Interim measures are short term actions used to control potential risks to human health or the environment while site investigation is being conducted and before a final remedy is approved. Interim measures have been ongoing at the former refinery for several years. They include: the interceptor trench along the southern boundary of the former refinery; the series of extraction wells on-site; the limitation of access to property by fencing; and the Enhanced Fluid Recovery at selected wells on-site and off-site. EPA and MDNR have requested Amoco to conduct additional interim measures at the former refinery. Amoco is currently preparing a work plan to address this request. Interim measures are not considered final cleanup measures but may be part of the final remedy.

Step 5:

Corrective Measures Study (CMS)

Based on the information obtained in the RFI, Amoco will conduct a CMS to identify and evaluate different alternatives to remediate the site. The CMS will begin when the final RFI is approved. A CMS does not need to address all potential remedies; it will focus on realistic remedies tailored to the nature and extent of the contamination. The CMS will also include Amoco's recommendation on a preferred remedy or remedy performance standards, including

proposed media cleanup levels and compliance time frames. Once the CMS is approved, the proposed final remedy will be placed on public notice and EPA/MDNR will solicit public comment. At the close of the public comment period, EPA/MDNR will consider the public's comments, and a final remedy will be approved for implementation.

Step 6:

Corrective Measures Implementation (CMI)

CMI includes detailed design, construction, operation, maintenance, and monitoring of the approved remedy, which will be performed by Amoco under EPA/MDNR oversight. The implementation of the approved corrective measures by Amoco will occur as part of a Post Closure Permit.

Q: What is the current status of the cleanup and what is the next step in the cleanup process?

A: EPA and MDNR have requested Amoco to conduct additional investigations to fully determine the nature and extent of contamination. Amoco is currently preparing a work plan to address this request. Once EPA and MDNR determine that the contamination at the former refinery has been fully classified, Amoco will proceed with the CMS.

Current Environmental Exposure

Q: How are health concerns part of EPA/MDNR's decision-making process?

A: During the corrective action process, a risk assessment is conducted as part of the RFI. The risk assessment addresses health effects in relation to current environmental exposure. In addition to this risk assessment, EPA and MDNR continue to support MDOH and ATSDR with their health studies.

Drinking Water

Q: Is tap water safe to drink?

A: Sugar Creek residents receive their water supply from the City of Independence. The City of Independence routinely tests for the presence of petroleum-based chemicals in its drinking water supply. Tests are conducted for benzene, toluene, ethylbenzene, and xylenes. Tests have been performed on the water taken directly from the wells before and after chemical treatments. Currently, these tests have not detected the presence of any of the previously mentioned chemicals in the water supply. To ensure the safety of the drinking water supply, the Independence Water Department has installed and routinely monitors 64 monitoring wells located around the well field. These wells were installed in specific areas and at specific depths. The analysis of groundwater samples collected from the monitoring well closest to the former refinery has failed to detect contaminants associated with the site.

Others Involved

Q: What agencies are involved and what are their roles?

A: MDNR In October 1997, MDNR assumed the lead from EPA on technical issues regarding the facility.

EPA EPA Region 7 continues to provide oversight and technical assistance to MDNR.

Agency for Toxic Substances and Disease Registry (ATSDR) ATSDR was petitioned in June 1998 to evaluate the public health impact of hazardous chemicals at the refinery. ATSDR is continuing to collect and review environmental data, community health concerns, and available health outcome data. Based on a preliminary review of the environmental data and the concerns of the community

members, the initial evaluation will focus on:

- # a review of off-site air, groundwater, and soil gas information;
- # a review of information on chemicals associated with this refinery to determine if there is any known association between these contaminants and risk to human health; and
- # a plan identifying future ATSDR activities and any need for additional information.

For more information, contact Denise Jordan-Izaguirre at (913) 551-7692.

Missouri Department of Health (MDOH)

In July 1998, the Missouri Department of Health's (MDOH) Cancer Inquiry Program began a cancer inquiry in response to a request from citizens who live near the former refinery. Citizens are concerned about neighborhood health problems, particularly cancer, which they suspect may be connected to contamination from the refinery. MDOH is currently conducting level 3 of the cancer inquiry research. For more information, contact Stan Cowan at (573) 876-3216.

City of Sugar Creek - - Although it is not directly involved with cleanup activities, the City of Sugar Creek coordinates activities with EPA/MDNR. For more information, contact Ron Martinovich at (816) 252-4400 Ext. 31.

Community Involvement Opportunities

Q: How can community members become more involved?

A: Community members may become more involved through a Community Advisory Group (CAG). A CAG is a way for community members to actively participate in the decision-making process at sites with environmental concerns. Citizens who are a

part of CAGs can learn more about their site, receive up-to-date information about cleanup status, ask questions, and discuss community concerns with EPA, MDNR, and others involved with cleanup activities. Information about development of a CAG will be available at the public availability session.

More Information

Q: Where can community members receive more information?

A: If community members would like more information about cleanup activities at the former refinery before the public availability session, please visit the

Mid-Continent Library
North Independence Branch
317 West 24 Hwy
Independence, Missouri 64050
(816) 252-0950
and/or contact

Shawntell Crossgrow
Community Involvement Coordinator
EPA Region 7
726 Minnesota Avenue
Kansas City, Kansas 66101
Toll-Free: 1-800-223-0425
or (913) 551-7003

Brian McCurren
Missouri Department of Natural Resources
Hazardous Waste Program
P. O. Box 176
Jefferson City, MO 65102
(573) 751-3553
or (800) 361-4827